

PD158780

Catalog No: tcsc3483



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

171179-06-9

Formula:

$C_{14}H_{12}BrN_5$

Pathway:

JAK/STAT Signaling;Protein Tyrosine Kinase/RTK

Target:

EGFR;EGFR

Purity / Grade:

>98%

Solubility:

DMSO : 21 mg/mL (63.60 mM; Need ultrasonic and warming)

Observed Molecular Weight:

330.18

Product Description

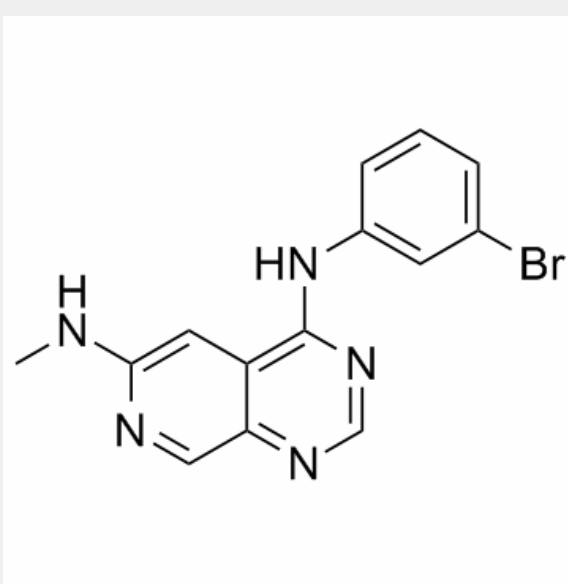
PD158780 is a potent **EGFR** family inhibitor with **IC₅₀**s of 8 pM, 49, 52, 52 nM for EGFR, ErbB2, ErbB3, and ErbB4, respectively.

IC50 & Target: IC50: 8 pM (EGFR), 49 nM (ErbB2), 52 nM (ErbB3), 52 nM (ErbB4)^[1]

In Vitro: PD158780 inhibits EGF receptor autophosphorylation in A431 human epidermoid carcinoma with IC₅₀ value of 13 nM. PD158780 is highly specific for the EGF receptor in Swiss 3T3 fibroblasts, inhibiting EGF-dependent receptor autophosphorylation

and thymidine incorporation at low nanomolar concentrations while requiring micromolar levels for platelet-derived growth factor- and basic fibroblast growth factor-dependent processes. PD158780 inhibits heregulin-stimulated phosphorylation in the SK-BR-3 and MDAMB-453 breast carcinomas with IC_{50} values of 49 and 52 nM, respectively, suggesting that the compound is active against other members of the EGF receptor family^[1].

In Vivo: PD158780 is active against clone formation in several breast tumors having different expression patterns of the ErbB family. PD158780 shows good therapeutic effect against the A431 epidermoid carcinoma when administered either intraperitoneally or orally. PD158780 produces measurable, significant effects against a mouse fibroblast transfected with human EGFR. PD158780 produces a significant therapeutic effect against the estrogen-dependent MCF-7 breast carcinoma at equitoxic dose levels^[1].



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